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EXAMINER				
DEAN, JR, JOSEPH E				
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

**Application No.**

10/577,703

**Applicant(s)**

SAITO, MASAHIRO

**Examiner**

JOSEPH DEAN, JR

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 April 2011.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-SB08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection. The rejection of Fyfe et al. (US5428666), Raviv et al. (US20020164983) (hereinafter Raviv), Inoue et al.(US6442616) (hereinafter Inoue), Matsugatani et al. (US20020080778) (hereinafter Matsugatani) and Urabe (US6125282) addresses claimed subject matter, therefore claims 1-9 will remain rejected as described below.

### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/28/2011 has been entered.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fyfe et al. (US5428666) (hereinafter Fyfe) and in view of Inoue et al. (US6442616) (hereinafter Inoue).

Per claim 1, Fyfe discloses a mobile communication terminal comprising: a plurality of communication interfaces (abstract, **i.e. plurality of Number Assignments Modules**); a communication interface selecting section which selects a communication interface via which the mobile communication terminal transmit data from the plurality of communication interfaces (abstract,col.4 line 55-65, col. 5 lines 3-7); a terminal identification address assigning section which assigns a terminal identification address for identifying the mobile communication terminal to the data (col.4 lines 42-54); a communication interface identification address assigning section which assigns a communication interface identification address for identifying the selected communication interface to the data (col.4 lines 13-30) but fails to explicitly disclose wherein the terminal identification address is unique to the mobile terminal; a transmitting section which transmits the data and the two kinds of addresses assigned to the data via the selected communication interface

However, Inoue discloses wherein the terminal identification address is unique to the mobile terminal (col.18 lines 17-29); a transmitting section which transmits the data and the two kinds of addresses assigned to the data via the selected communication interface (col.3 lines 35-63, col. 10 lines 1-18, **i.e. capable of transmitting two kinds of addresses if secret communication is required, see fig 5 ref. 45 and 46 for selected communication interface**).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Fyfe, which provides plurality of Number Assignments Modules (NAM) interfaces and Inoue provides mobile computer capable of address control and management when moving through it's own and external networks as a whole to produce the invention as claimed with a reasonable expectation of managing data that processed though the networks.

Per claim 6, Fyfe discloses a computer readable medium storing a program of instruction executable by a computer to perform a function for a mobile communication terminal (the Fyfe reference inherently has computer readable medium, where in col.4 lines 3-12, Fig 1, shows a process, the process would be implemented by a processor that requires a "computer readable medium", e.g., a RAM, to function, the function comprising the steps of: selecting a communication interface via which the mobile communication terminal transmits data, from a plurality of communication interfaces (abstract, col.4 line 55-65, col. 5 lines 3-7); assigning a terminal identification address for identifying the mobile communication terminal to the data (col.4 lines 42-54); assigning a communication interface identification address for identifying the selected communication interface to the data (col.4 lines 13-30) but fails to explicitly disclose wherein the terminal identification address is unique to the mobile communication terminal; and transmitting the data and the two kinds of addresses assigned to the data via the selected communication interface.

However, Inoue discloses wherein the terminal identification address is unique to the mobile communication terminal (col.18 lines 17-29); and transmitting the data and

the two kinds of addresses assigned to the data via the selected communication interface (col.3 lines 35-63, col. 10 lines 1-18, **i.e. transmitting two kinds of addresses when secret communication is required, see fig 5- ref. 45 and 46 for selected communication interface**).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Fyfe, which provides plurality of Number Assignments Modules (NAM) interfaces and Inoue provides mobile computer capable of address control and management when moving through it's own and external networks as a whole to produce the invention as claimed with a reasonable expectation of managing data that processed though the networks.

Per claim 8, Fyfe discloses a mobile communication method comprising: selecting a communication interface via which the mobile communication terminal transmits data, from a plurality of communication interfaces (abstract, col.4 lines 45-55, col.5 lines 3-7); assigning a terminal identification address for identifying a mobile communication terminal to data (col.4 line 42-54); assigning a communication interface identification address for identifying the selected communication interface to the data (col.4 lines 42-54); but fails to disclose wherein the terminal identification address is unique to the mobile communication terminal; storing an address table in which the assigned terminal identification address and the assigned communication interface identification address are associated with each other; and transmitting the and the two kinds of addresses assigned to the data to a certain destination.

Inoue discloses wherein the terminal identification address is unique to the mobile communication terminal (col.18 lines 17-29); storing an address table in which the assigned terminal identification address and the assigned communication interface identification address are associated with each other (col.6 lines 9-32); and transmitting the and the two kinds of addresses assigned to the data to a certain destination (col. 3 lines 35-63 and col.10 lines 1-18, **i.e. transmitting two kinds of addresses when secret communication is required, see fig 5- ref. 45 and 46 for selected communication interface**).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Fyfe, which provides plurality of Number Assignments Modules (NAM) interfaces and Inoue provides mobile computer capable of address control and management when moving through it's own and external networks as a whole to produce the invention as claimed with a reasonable expectation of managing data that processed though the networks.

5. Claims 3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Raviv (US20020164983).

Per claim 3, Raviv discloses a mobile communication managing apparatus comprising: a mobile communication terminal side receiving section which receives data that is assigned with two kinds of addresses including a mobile communication terminal identification address for identifying a mobile communication terminal having a plurality of communication interfaces and a communication interface identification address for

identifying a communication interface of the mobile communication terminal (paragraph 0249 and 0250); an address storing section which stores an address table in which the mobile communication terminal identification address and the communication interface for different communication methods (**claim language too broad for different communication methods, applicant may need to narrow claim as described in remarks filed 4/28/11, where applicant describes methods such as mobile telephone network or wireless LAN**) identification address that are assigned to the received data are associated with each other (paragraph 0253, 0257 and 0284); a communication apparatus side transmitting section which transmits the data received by the mobile communication terminal side receiving section to a certain destination (paragraph 0252); a communication apparatus side receiving section which receives data being assigned with a mobile communication terminal identification address (paragraph 0252, Fig 3); a communication interface detecting section which detects a communication interface identification address that corresponds to the mobile communication terminal identification address being assigned to the data received by the communication apparatus side receiving section based on the address table (paragraph 0254); and a mobile communication terminal side transmitting section which transmits the data received by the communication apparatus side receiving section via the detected communication interface (paragraph 0245, **i.e. data is sent through authorization server and responses sent via interface apparatus to the mobile device**).



Per claim 7, Raviv discloses a computer readable medium storing a program of instruction executable by a computer to perform a function for mobile communication management (the Raviv reference inherently has computer readable medium, where in paragraph 0265 and 0266, Fig 4, shows a process, the process would be implemented by a processor that requires a "computer readable medium", e.g., a RAM, to function, the function comprising the steps of: receiving data that is assigned with two kinds of addresses including a mobile communication terminal identification address for identifying a mobile communication terminal having a plurality of communication interfaces for different communication methods and a communication interface identification address for identifying a communication interface of the mobile communication terminal from the mobile communication terminal (paragraph 0249 and 250); storing an address table in which the mobile communication terminal identification address and the communication interface identification address that are assigned to the received data are associated with each other (paragraph 0253, 0257 and 0284); transmitting the received data to a certain destination (paragraph 0252); receiving data assigned with a mobile communication terminal identification address from a communication apparatus (paragraph 0252, Fig3); detecting a communication interface identification address that corresponds to the mobile communication terminal identification address being assigned to the data received from the communication apparatus based on the address table (paragraph 0254); and transmitting the data received from the communication apparatus via the detected communication interface

(paragraph 0245, **i.e. data is sent through authorization server and responses sent via interface apparatus to the mobile device**).

6. Claim2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fyfe and Inoue as applied to claim1 above, and further in view of Matsugatani et al. (US20020080778) (hereinafter Matsugatani).

Per claim 2, the combination discloses the mobile communication terminal according to claim 1, but fail to disclose further comprising: a radio wave monitoring section which monitors a status of radio wave reception at a current location, wherein the communication interface selecting section selects the communication interface in accordance with the monitored status of the radio wave reception. However, Matsugatani discloses a radio wave monitoring section which monitors a status of radio wave reception at a current location (paragraph 0038), wherein the communication interface selecting section selects the communication interface in accordance with the monitored status of the radio wave reception (paragraphs 0040, 0044 and Fig 3, ref. 27, 28).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Fyfe, which provides plurality of Number Assignments Modules (NAM) interfaces, Inoue, provides mobile computer capable of address control and management when moving through it's own and external networks and Matsugatani, provides monitoring device for signal strength as a whole to produce the invention as claimed with a reasonable expectation of achieving and maintaining a quality signal for communication.

7. Claims are 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fyfe, Inoue and further in view of Raviv.

Per claim 4, Fyfe discloses a mobile communication system comprising: a mobile communication terminal including: a plurality of communication interfaces for different methods (abstract, **claim language too broad for different communication methods, applicant may need to narrow claim as described in remarks filed 4/28/11, where applicant describes methods such as mobile telephone network or wireless LAN**); a communication interface selecting section which selects a communication interface via which the mobile communication system transmit data from the plurality of communication interfaces (abstract, col.4 lines 45-55, col.5 lines 3-7); a mobile communication terminal identification address assigning section which assigns a mobile communication terminal identification address for identifying the mobile communication terminal to data (col.4 lines 42-54); a communication interface identification address assigning section which assigns a communication interface identification address for identifying the selected communication interface to the data (col.4 lines 13-30); and a transmitting section which transmits the data being assigned with the two kinds of addresses via the selected communication interface (col.2 lines 3-22, col.3 lines 3-23); but fail to disclose a mobile communication managing apparatus including: a mobile communication terminal side receiving section which receives the data from the mobile communication terminal; an address storing section which stores an address table in which the mobile communication terminal identification address and the communication interface identification address that are assigned to the received data are associated

with each other; a communication apparatus side transmitting section which transmits the data received by the mobile communication terminal side receiving section to a certain destination; a communication apparatus side receiving section which receives data being assigned with a mobile communication terminal identification address; a communication interface detecting section which detects a communication interface identification address that corresponds to the mobile communication terminal identification address being assigned to the data received by the communication apparatus side receiving section based on the address table; and a mobile communication terminal side transmitting section which transmits the data received by the communication apparatus side receiving section via the detected communication interface; wherein the terminal identification address is unique to the mobile terminal; a transmitting section which transmit the data and the two kinds of addresses assigned to the data via selected communication interface.

Inoue discloses wherein the terminal identification address is unique to the mobile terminal (col.18 lines 17-29); a transmitting section which transmit the data and the two kinds of addresses assigned to the data via selected communication interface (col.3 lines 35-63, col. 10 lines 1-18, **i.e. capable of transmitting two kinds of addresses if secret communication is required, see fig 5 ref. 45 and 46 for selected communication interface**); address storing an address table in which the assigned terminal identification address and the assigned communication interface identification address are associated with each other (col.6 lines 9-32); a communication apparatus side transmitting section which transmits the data received by

the mobile communication terminal side receiving section to a certain destination (col. 3 lines 35-63 and col.10 lines 1-18); a communication apparatus side receiving section which receives data being assigned with a mobile communication terminal identification address (col. 10 lines 1-18); a mobile communication managing apparatus including: a mobile communication terminal side receiving section which receives the data from the mobile communication terminal (col.10 lines 1-18);

Raviv discloses a communication interface detecting section which detects a communication interface identification address that corresponds to the mobile communication terminal identification address being assigned to the data received by the communication apparatus side receiving section based on the address table (paragraph 254); and a mobile communication terminal side transmitting section which transmits the data received by the communication apparatus side receiving section via the detected communication interface (paragraph 0245, **i.e. data is sent through authorization server and responses sent via interface apparatus to the mobile device**).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Fyfe, Inoue and Raviv, which provides an apparatus for supporting a mobile device for mobile and data communication and managing data while moving through internal and external networks as a whole to produce the invention as claimed with a reasonable expectation of achieving overall efficiency for mobile and data communications via supporting apparatus, and by matching identification data by the mobile terminal.

Per claim9, the combination discloses the mobile communication method according to claim 8, further comprising: Inoue discloses receiving data being assigned with the terminal identification address (col. 10 lines 1-18); but failing to explicitly discloses detecting the communication interface identification address that corresponds to the terminal identification address for identifying the mobile communication terminal based on the address table; and transmitting the received data via the detected communication interface.

Raviv discloses detecting the communication interface identification address that corresponds to the terminal identification address for identifying the mobile communication terminal based on the address table (paragraph 0254); and transmitting the received data via the detected communication interface (paragraph 0245, **i.e. data is sent through authorization server and responses sent via interface apparatus to the mobile device**).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Fyfe, Inoue and Raviv , which provides an apparatus for supporting a mobile device for mobile and data communication and managing data while moving through internal and external networks as a whole to produce the invention as claimed with a reasonable expectation of achieving overall efficiency for mobile and data communications via supporting apparatus, and by matching identification data by the mobile terminal.

8. Claim5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fyfe, Inoue, Raviv, as applied to claim4 above, and further in view of Matsugatani and Urabe (US6125282).

Per claim 5, the combination disclose the mobile communication system according to claim 4, wherein Matsugatani discloses the mobile communication terminal includes a switching informing section which transmits a switch information signal to the mobile communication managing apparatus when the communication interface selecting section selects another communication interface from the plurality of communication interfaces (paragraphs 0033, 0034 0040, 0043 and 0044), the mobile communication managing apparatus includes a switching signal receiving section which receives the switch information signal (paragraph 0036); Urabe discloses the switch information signal being assigned with the mobile communication terminal identification address and a communication interface identification address corresponding to the communication interface to be newly selected (col.7 lines 53-67 col.8 lines 1-18), and the address storing section stores the address table in which the mobile communication terminal identification(i.e. **communication terminal ref.11, Fig 3**) address and the communication interface (i.e. **informational terminal ref. 21, Fig 3**) identification address that are assigned to the switch information signal are associated with each other (col.7 lines 1-15 and col.9 lines 13-47).

Therefore, one skilled in the art would have found it obvious from the combined teachings of Fyfe, Inoue, Raviv, Matsugatani, **Urabe**, provides control terminal that analyzes information from many devices where identification is stored in several

database as a whole to produce the invention as claimed with a reasonable expectation of achieving identifying terminal address and communication interface data for detecting the mobile device for effective communication.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JOSEPH DEAN, JR whose telephone number is (571)270-7116. The examiner can normally be reached on Monday through Friday 7:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bost Dwayne can be reached on 571-272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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